

Relationship Of Organizational Intelligence (OI) And Personal Creativity In Public Organizations (A Case Study)

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INTRODUCTION

After universe appeared and social life developed, humans started to invent. Now-a-days, changes happen widely and deeply and effect our lives. Today creativity is known as a key of success and survival. So, these evolutions in technology, science and management make universal successful organization to act depending on creativity (Shahraray & Madanepoor, 1997). In scientist vision, creativity is axle of worldwide movement in 21 century. Creativity is vital in an unstable situation. If there is not any creativity, the organization will not run for a long time (Zaree, 1995). It is the ability of new and different look to a subject or process of breaking and rebuilding knowledge about a subject and getting new knowledge (Golestan, 2004). **The Organization is alive and, for moving ahead, it needs continuous information (Pere, 2007). With the development of the concept of "Organizational IQ", some researchers notice the relationship of Organizational IQ and Creativity. Haim (1999) mentioned that "Organizational IQ has a strong effect on a company's performance."** About the different characteristics of Organizational IQ in different countries, Motohashi Kazuyuki conducted a comparison research on the Organizational IQ in high-tech organizations between Japan and the US in 2001 (Haim & Ziegler, 1999). The different characteristics of Organizational IQ were used to explain the strengths and weaknesses of Japanese Enterprises. Another researcher, Massaki Hirano used Organizational IQ framework to analyze and compare Japanese and the US product development organizations. Their research propositions suggested key difference between both countries. **So, the present research is planned to ascertain the relationship between OI and personal creativity in Social Security Organization (SSO).**

LITERATURE REVIEW

* **Creativity:** There are many definitions of creativity. A number of them suggest that creativity is the generation of imaginative new ideas (Newell, 2000), involving a radical newness innovation or solution to a problem, and a radical reformulation of problems. Other definitions suggest that a creative solution can simply integrate existing knowledge in a different way. A third set of definitions proposes that a creative solution, either new or recombined, must have value (Hihhins, 1999). A novel idea is not a creative idea unless it is valuable or it implies positive evaluation. Also, according to Ogilvie (1998), imagination, which involves the generation of ideas not previously available as well as the generation of different ways of seeing events, is important to achieve creative actions. To combine this variety of definitions, we can say that creativity involves the generation of new ideas or the recombination of known elements into something new, providing valuable solutions to a problem. It also involves motivation and emotion. **Creativity "is a fundamental feature of human intelligence in general. It is grounded in everyday capacities such as the association of ideas, reminding, perception, analogical thinking, searching a structured problem-space, and reflecting self-criticism. It involves not only a cognitive dimension (the generation**

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of new ideas) but also motivation and emotion, and is closely linked to cultural context and personality factors” (Boden, 1998). According to Boden (1998), there are three main types of creativity, involving different ways of generating novel ideas:

a) The **“Combinational”** creativity that involves new combinations of familiar ideas.

b) The **“Exploratory”** creativity that involves the generation of new ideas by the exploration of structured concepts.

c) The **“Transformational”** creativity that involves the transformation of some dimension of the structure, so that new structures can be generated.

Creative thinking in a disciplined manner can play a real role in innovation. **“Creativity and innovation are normally complementary activities, since creativity generates the basis of innovation, which, in its development, raises difficulties that must be solved once again, with creativity. It is not possible to conceive innovation without creative ideas, as these are the starting point” (European Commission, 1998).** Freud knows confliction as creativity resource. He believes that creative ones usually accept new idea and beliefs whereas, common ones reject them (Hossaine, 1999). Studying researches about traits of creative people introduces these: Subtle, Curious, Flexible, Clever, Risky, Unselfish, Accent To Other Fate, Independent, Emotionally Stable And Self Confident. On top of them, they enjoy their jobs (Agae, 1999 & Samadaghaee, 2002). Open organizational environment and flexibility towards acceptance of changes is suitable for creativity. This is organizational culture that prepares proper atmosphere for growing or destroying it (Abraze & Eerebareyan, 2007; Alavi, 2004).

✱ **Organizational Intelligence (OI):** The concept of **Organizational IQ** (Organizational Intelligence Quotient) was first developed by Haim (1999) and other researches, who conducted a questionnaire survey of firms in Silicon Valley and used the results to analyze the relationship between organizational IQ and Firm Performance. Various definitions have been applied to “organizational intelligence”. Some of these definitions include: Wilensky was said that the problem of gathering, processing, interpreting and communicating the technical and political information needed in the decision making process (Liebowitz, 1999). Haecel and Nonal argue that the organization's ability to deal with complexity is its ability to capture, share, and extract meaning from marketplace signals (Liebowitz, 1999). McMaster (1995) said that capacity for computation can be applied to information that is externally gained or internally generated to meet survival challenges (Liebowitz, 1999).

Organizational IQ is a quantitative measure of an organization's effectiveness in information distribution, decision making and execution (Synesis, 2001). Organizational intelligence is the capacity of an enterprise to mobilize all of its available brain power and to focus that brain power on achieving its mission (Albrecht, 2003). Organizational intelligence has become a popular topic recently in business and academia and attracts many researchers and practitioners from different fields. Because of many studies in such different disciplines and perspectives, the interpretation of organizational intelligence shows a discrepancy, resulting in disorder in the organizational literature (Dayan, 2006). Organizational intelligence is a measure of a firm's capabilities to assimilate, manage and use information in order to make effective decisions (Haim, 1999). Individual and organizational intelligences are conceptualized as being functionally similar. Organizational intelligence, however, is a social outcome and is related to individual intelligence by mechanisms of aggregation, cross-level transference and distribution (Glynn, 1996). The Liebowitz's view is that organizational intelligence is the collective assemblage of all intelligence that contributes towards building a shared vision, renewal process, and direction for the entity. **Specifically, organizational intelligence involves the following knowledge functions: Transform Information Into Knowledge, Identify And Verify Knowledge, Capture/secure Knowledge, Organize Knowledge, Retrieve And Apply Knowledge, Combine Knowledge, Create Knowledge And Distribute/sell Knowledge (Liebowitz, 1999).** Albrecht (2002) designed a modal that includes seven key dimensions of organizational intelligence:

✱ **Strategic Vision:** Every enterprise needs a theory-a concept, an organizing principle, a definition of destiny it seeks to fulfill. Strategic vision refers to the capacity to create, evolve, and express the purpose of the enterprise and not to any particular vision, strategy, or mission concept in and of itself. The OI dimension of strategic vision presupposes that the leaders can articulate and evolve a success concept and that they can reinvent it when and as necessary.

✱ **Shared Fate:** When all or most of the people involved in the enterprise, including associated stakeholders like key

suppliers and business partners, and in some cases, even the families of its members, know what the mission is, have a sense of common purpose, and understand their individual parts in the algebra of its success, they can act synergistically to achieve the vision, this sense that **"We're all in the same boat"** creates a powerful sense of community and esprit de corps. Without a sense of shared fate, the psychological tone of the culture degenerates into a **"Look out for number one"** spirit.

✳ **Appetite for Change:** Some organizational cultures, usually led by their executive teams, have become so firmly set in their ways of operating, thinking, and reacting to the environment that change represents a form of psychological discomfort or even distress. In others, change represents challenge, opportunity for new and exciting experiences, and a chance to tackle something new. People in these environments see the need to reinvent the business model as a welcome and stimulating challenge and a chance to learn new ways of succeeding.

✳ **Heart:** Separate from the element of shared fate, the element of heart involves the willingness to give more than the standard. Organizational psychologists refer to discretionary effort as the amount of energy the members of the organization contribute over and above the level they have "contracted" to provide.

✳ **Alignment and Congruence:** Any group of more than a dozen people will start an organization bumping into one another without a set of rules to operate by. They must organize themselves for the mission, divide up jobs and responsibilities and work out a set of rules for interacting with one another and for dealing with the environment. In the intelligent organization, the system, broadly defined, all come together to enable the people to achieve the mission.

✳ **Knowledge Deployment:** More and more these days, enterprises succeed or fail based on the effective use of knowledge, information and data. Almost every business organization these days depends heavily on the acquired knowledge, know-how, judgment, wisdom and shared sense of competency possessed by its people, as the wealth of operational information that flows through its structure every minute. Knowledge deployment deals with the capacity of the culture to make use of its valuable intellectual and informational resources. OI must include the free flow of knowledge throughout the culture and the careful balance between the conservation of sensitive information and the availability of information at key points of need. It must also include support and encouragement for new ideas, new inventions and an open-minded questioning of the status quo.

✳ **Performance Pressure:** It's not enough for executives and managers to be preoccupied with the performance of the enterprise, i.e. its achievement of identified strategic objectives and tactical outcomes. In the intelligent organization, everyone owns the performance proposition, i.e. the sense of what has to be achieved and the belief in the validity of its aims. Leaders can promote and support a sense of performance pressure, but it has the most impact when it is accepted by all members of the organization as a self-imposed set of mutual expectations and an operational imperative for shared success. When people hold one another accountable for their contributions to the mission, a performance culture takes shape, and every new member who joins can feel the shared sense of imperative (Albrecht, 2003).

✳ Some investigators examined the relationship between creativity and organizational intelligence, and the results that emerged showed significant relationship between creativity and organizational intelligence. In a study, Al-Sadat (2008) found out significant relationship between organizational intelligence and personnel creativity in Shiraz University of medical sciences. Tegano and Moran (1989) compared the mean scores of males and females on creativity, the results illustrated that there was significant difference between two groups of gender i.e. the mean scores of males were bigger than their females counterparts.

RESEARCH QUESTIONS

- 1) Is there any significant correlation between dimensions of organizational intelligence and personnel creativity?
- 2) What is regression equation of personnel creativity on dimensions of organizational intelligence?
- 3) Is there any significant difference between the mean scores of male and female employees on personal creativity?

RESEARCH METHODOLOGY

✱**Sample:** The sample size of the present study consists of 156 employees (55 women and 101 men) that were selected at random from Social Security Organization of Tabriz in Iran.

✱**Tools Used:** Organizational intelligence questionnaire was designed by Albrecht (2002). **It contains 49 items and it has 7 dimensions namely: Strategic vision, Shared Fate, Appetite for Change, Heart, Alignment and Congruence, Knowledge Development and Performance Pressure.** The reliability of this questionnaire was reported to be 0.927.

Creativity was assessed by Randsepp Creativity Questionnaire that was published with 50 items in 1979 to measure personal creativity in the organization. Its reliability was reported to be 0.892. Both of them are in 5 point Likert-type scale ranging from "I strongly disagree" to "I strongly agree". Data analysis was carried out by using the statistical program packages SPSS.

RESULTS

Table 1 : Pearson Correlation Between Creativity And Organizational Intelligence With Sub-scales (n=156)

Variable	Strategic Vision	Shared Fate	Appetite for Change	Heart	Alignment & Congruence	Knowledge Development	Performance Pressure	Total Oi
Creativity	0.002	0.489**	0.476**	0.120	0.502**	0.433**	0.271**	0.507**

** Correlation is significant at the 0.01 level (2-tailed).

The results of Table1 show that there is **Positive Significant Correlation Between The Mean Scores Of Creativity And Organizational Intelligence Dimensions Namely Shared Fate, Appetite For Change, Alignment And Congruence, Knowledge Development, Performance Pressure And Total Scores Of Organizational Intelligence** ($p < 0.01$). But the results illustrate that there is not any significant correlation between the mean scores of creativity and strategic vision and heart.

Table 2: Model Summary of the Regression of Creativity on Organizational Intelligence and its Dimensions

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.507	0.257	0.253	19.23006
2	0.553	0.305	0.296	18.65983

1. Predictors: (Constant), Organizational Intelligence
2. Predictors: (Constant), Organizational Intelligence, Heart

As seen, the significant predictors (organizational intelligence and heart) have determined 30.5% of the variance of creativity together.

Table 3: Regression Analysis to Predict Creativity on Organizational Intelligence and its Dimensions

Variables	B	Std. Error	Beta	t	Sig.
(constant)	118.856	10.486	-	11.335	0.000
Organizational Intelligence	0.619	0.77	0.666	8.006	0.000
Heart	-1.485	0.457	-0.270	-3.249	0.001

As seen, at the first step, organizational intelligence has satisfied the entrance criterion of the regression as a very important predictor (Beta=0.666). At second step, the heart has satisfied the entrance criterion predictor (Beta= -0.270). But other dimensions of organizational intelligence namely strategic vision, shared fate, appetite for change, alignment and congruence, knowledge development and performance pressure could not satisfy the entrance criterion of the regression, then regression equation of the regression of creativity on organizational intelligence and its dimensions are as follows: $\text{creativity} = 0.666 (\text{organizational intelligence}) + (-0.270) (\text{heart})$.

The results of Table- 4 illustrate that there is significant difference between two groups of gender on strategic vision i.e. men significantly obtained higher mean scores on this dimension than women ($p < 0.001$). But results of t test did not give any significant difference between women and men employees on creativity, shared fate, appetite for change,

Table 4: Shows the SD, Mean, t value and P value Of Two Groups Of Gender On Creativity, Organizational Intelligence And Its Dimensions

Variables	Gender	Mean	S.D.	t value	P value
Creativity	Women	179,9091	18,38908	-1.898	0.60
	Men	186,4257	23,85848		
Strategic vision	Women	15,6182	2,28919	-5.988	**0.000
	Men	17,6931	1,93774		
Shared fate	Women	26,5636	7,13563	-0.194	0.846
	Men	26,7921	6,95315		
Appetite for change	Women	19,6364	4,40271	-1.749	0.082
	Men	21,0891	5,23278		
Heart	Women	22,6000	4,36569	0.825	0.411
	Men	22,0396	3,87278		
Alignment & congruence	Women	24,0909	4,86207	-0.994	0.322
	Men	24,9208	5,04714		
Knowledge development	Women	24,1636	5,25203	0.453	0.651
	Men	23,7822	4,90225		
Performance pressure	Women	24,1273	4,97049	0.807	0.421
	Men	23,5347	4,03129		
Overall OI	Women	156,8000	23,48869	-0.760	0.448
	Men	159,8515	24,20842		

**P<0.001

heart, alignment and congruence, knowledge development, performance pressure and overall scores of organizational intelligence ($p>0.05$).

CONCLUSION

Today, regarding the extent of changes in operational organization which are from structural and conceptual perspectives, we can assertively illustrate that organizational success is a way to creativity in this age. Creativity which can adjust itself to new conditions and when it is possible, recognizes the thoughtful forces. Creativity and intelligence are important characters of each organization. Organizational intelligence is a social outcome that is related to individual intelligence, and one part of it considers the creativity. Many researchers analyzed the relationship between creativity and organizational intelligence dimensions but few researchers analyzed the relationship of two variables in general. Organizational intelligence plays an important role in performance of managers, development of organizational creativity and codifying the strategies. Clearly, we can say that both of these characters in organizations (intelligence and creativity) are the biggest factors of organizational success. The obtained results of this study, and also other investigators revealed that there is positive correlation between organizational intelligence and creativity. By increasing organizational intelligence, the personal creativity would increase and vice versa is also applicable - if the amount of organizational intelligence decreases, personal creativity would decrease. **The findings of present study are in conformity with the research of Al-sadat (2008). Human beings are different in some perspectives such as aptitude, sensations, and intelligence quotient. In this study, gender as a factor for assessing the creativity and dimensions of organizational intelligence was investigated. Results of the present research exhibited that there was significant difference between mean scores of men and women on strategic vision, but another dimensions did not emerge as significant factors. The results of Tegano and Moran (1986) study's were not similar to the results of the present study. In general, it is inferred that intelligence is an undeniable factor for creativity in organizations.**

BIBLIOGRAPHY

1. Abraze, M., & Etebareyan, A. (2007). Organizational Intelligence and Prevention of Collective Stupidity. *Tehran organizational knowledge management*, 11.
2. Agaee, Fishance T., (1999). Creativity and Innovation in Humans and Organizations, *Tehran, Terme*.
3. Alavee, S.H.R., & Khesre, M. (2004). Relationship of Personnel Creativity and Organizational Environment, *Payam modereyat*, 8, 133.
4. Albrecht, K. (2002). The Power of Minds at Work: Organizational Intelligence in Action, *Amacon, New York*
5. Azizi, A. R. (2007). Study of Relationship of Organizational knowledge Management and OI in Agricultural Organization, Shiraz.
6. Boden, M. A. (1998), Creativity and artificial intelligence. *Artificial Intelligence*, 347-356.
7. Dayan, M. (2006). The Moderating Effect of Market Turbulence on Organizational Intelligence. *international conference on Management of Innovation and Technology*, 566-70.
8. Ogilvie, D. T. (1998). Creative action as a dynamic strategy: using imagination to improve strategic solutions in unstable environments. *Journal of Business Research*, 49-56.
9. European Commission. (1998), *Innovation Management Techniques in Operation*, European Commission, Luxembourg.
10. Glynn, M. (1996). Innovative Genius: A Framework for Relating Individual and Organizational Intelligence to Innovation. *Academy of Management Review*.
11. Golestan, H.S.M. (2004). Introduction of Innovation and Creativity, *Esfahan Jahad Daneshgahe*, 1-14.
12. Haim, M., & Ziegler, J. (1999). Survival of the smartest: Managing Information for rapid action and world -class performance, Wiley.
13. Higgins, L.F. (1999). Applying principles of creativity management to marketing research efforts in high-technology markets. *Industrial Marketing Management*, 305-317.
14. Hossaine, A.S. (2000). Creativity Nature and Ways of Improvement, Mashhad.
15. Jose, A., William, R., Qualls, J., Fuentes, C. (2008). Involving Mind, Body and Friends: Management that Engenders Creativity. *J. Business Res*, 631-9.
16. Newell, A., & Shaw, J. C. (1972). The process of creative thinking, in A. Newell and H.A. Simon (eds), *Human Problem Solving*, Prentice Hall, Englewood Cliffs, NJ, 144-174.
17. Pere, Z. (2007). A Model for Organizational Intelligence. *In the 14th yearly seminar for management student, Tehran*, 272.
18. Rahimi, H. (2008). Study Relationship of Organizational Knowledge Management and Creativity in Esfahan University Professors. *In the first congress about knowledge management*.
19. Sadahara, T., & Niwa, K. (2004). Knowledge Sharing in Inter-organizational Intelligence, *International Journal of Technology Management*, 414-28.
20. Samadaghaee, J. (2002). Techniques of Collective & Individual Creativity. *Tehran Center of Public Management Education*.
21. Shahraray, M., & Madanepoor, R. (1997). Innovative and Creative Organization. *Management knowledge*, 33-48.
22. Tegano, D.W., & Moran, J. D. (1989). Sex differences in the original thinking of preschool and elementary school children. *Creativity Research Journal*, 102-110.
23. Zaree, M.H. (1995). *Creativity, Management knowledge*, 59-66.
24. Liebowitz, J. (1999). Key ingredients to the success of an organization's knowledge management strategy. *Knowledge and Process Management*, No: 6, pp: 37-40.
25. Liebowitz, J. (1999). Building organizational intelligence: a knowledge management primer, pp: 1-15

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CONCLUSION OF THE STUDY

The rural market of India is fascinating and challenging at the same time. It has immense potential on account of its sheer size. Even a gradual growth pushes up the sales of a product substantially, in view of the huge base. The market pioneers are getting rewarded by capturing the rural markets. Simultaneously, due to the problems and hurdles posed by rural markets, the firms have to directly encounter them and put in a great deal of effort to get a sizeable share of the market. They need to recognize that the rural market a developing market. It is often said that markets are made, not found. This is especially true of the rural market of India. It is a market meant for the truly creative marketers.

BIBLIOGRAPHY

- 1) Banerjee, S., (1986), "Advertising and Social Change- The Indian Experience", *Man and Development*, pp. 69-86.
- 2) Easwaran, S., (2006), "Wealth Creation through Rural Markets- Some Issues and Strategies", *Marketing Mastermind*, The ICFAI University Press, March, pp. 47-52 .
- 3) Gopalswamy, T.P., (2005), Rural Marketing- Environment, problems, Strategies (2nd ed.), Vikas Publishing House, 2005, pp.6.
- 4) Kotler Philip, (2006), "*Marketing Management*", Prentice Hall of India, New Delhi, 12th Edition, pp. 568.
- 5) Mathur, A. and Bedi, H.K., (2005), "Techniques of Advertising for Fast Moving Consumer Goods", *Marketing Mastermind*, The ICFAI University Press, April, pp. 19-33.
- 6) Richards, J. I., and Curran, C. M., (2002), "Oracles on Advertising: Searching for a Definition", *Journal of Advertising*, summer, 31(2), pp.63-77.
- 7) Sakthivel, A.K., (2006), "Designing Integrated Promotion Mechanism to Influence Indian Consumer's Buying Behaviour", *Advertising Express*, The ICFAI University Press, November, pp. 37-42.
- 8) Sushma, (2005), "Indian Rural Market- Knowing the Potential", *Marketing Mastermind*, The ICFAI University Press, July, pp. 26-29.
- 9) Victor. P. B., "*Marketing Management*", Vol. 07-Y 66207-X, McGraw Hill Series in Marketing, pp. 593 .